

## **South Coast Air Basin CO Maintenance Plan Winter Emissions for Calendar Years 2004, 2009, and 2015**

The Air Quality and Transportation Planning Branch requested estimates of motor vehicle carbon monoxide emissions for the South Coast Air Basin, for calendar years 2004, 2009, and 2015 to support development of the South Coast CO Maintenance Plan.

### Methodology

To estimate emissions in 2015, staff ran EMFAC2002, v2.2 (Apr03), for the South Coast Air Basin by subarea, winter season, interpolating vehicle populations from calendar years 2010 and 2020 populations as described in **Assessment 410, South Coast SIP Inventory** (April 2003). This document may be found at:

<http://www.arb.ca.gov/planning/sip/scsip03/scsip03.htm>. To estimate emissions in 2009, staff ran EMFAC using 2009 vehicle populations interpolated from those found for calendar years 2006 and 2010 in Assessment 410 referenced above. To estimate 2004 emissions, staff ran EMFAC with vehicle populations that were extrapolated from the same calendar year 2006 and 2010 populations. The vehicle activity used for these interpolations and extrapolation did not include the transportation control measures and growth assumptions found in the adopted 2001 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP). Results from SCAG's baseline model results were used at the request of the South Coast Air Quality Management District (South Coast District). Assessment 410 describes the baseline scenario as follows:

*SCAG has provided baseline case EMFAC input files, which contain travel model outputs based on 1998 socioeconomic data (2.5% higher population and employment growth in 2010) and a more limited set of transportation projects (new mixed flow projects included, high occupancy vehicle and transit projects excluded). The baseline cases were provided for calendar years 2006, 2010 and 2020.*

For each of the counties in the South Coast Air Basin, staff entered the interpolated and extrapolated populations for ten of the thirteen classes of motor vehicles into EMFAC2002 to generate VMT and emissions estimates. EMFAC default population estimates were retained for the remaining three classes (motor homes, urban buses and school buses) because SCAG does not estimate activity for these vehicle classes.

### Results

The results, summarized in the table below as the SCAG 2001 RTP Baseline Case, are shown relative to the adopted 2001 RTP Plan Case used in the 2003 SIP (including TCMs and a lower growth forecast). Calculations are found in the file

[http://www.arb.ca.gov/planning/sip/sccsip05/sc\\_winter\\_co\\_2004\\_09\\_15\\_interp\\_veh\\_pop.xls](http://www.arb.ca.gov/planning/sip/sccsip05/sc_winter_co_2004_09_15_interp_veh_pop.xls)